

Claim Rejections - 35 U.S.C. § 103

- The Examiner rejected claims 1 and 6 under §103(a) as being unpatentable over Japanese 03169644 to Kurotori (hereinafter Kurotori) in view of US Patent 4,752,784 to Saito et al. (hereinafter Saito '784) and US Patent 4,540,996 to Saito (hereinafter Saito '996). Applicants respectfully traverse this rejection because the references fail to establish *prima facie* obviousness in that: i) there is no motivation to combine the references as suggested by the Examiner; ii) the combination of references does not teach or suggest all the elements as set forth in Applicants' claims; and iii) the Examiner has failed to adequately set forth the basis of his rejection.

First, there is no motivation to combine the disparate teachings of Saito '784 and Kurotori as suggested by the Examiner.

The Examiner cites Kurotori as teaching an ink jet system which discharges an oily ink containing a resin and a coloring component directly onto a recording paper, wherein fixing is performed. Additionally, the Examiner cites Saito '784 as teaching an ink jet recording method, wherein an ink jet head uses a combination of thermal energy and an electrostatic field to eject ink. But there is no fixing in Saito '784. In fact, Saito '784 teaches that the system is advantageous in that it does not require a fixing step. Lastly, the Examiner cites Saito '996 as teaching an ink jet print head which sequentially deposits drops of different color inks onto a recording medium.

The Examiner then asserts that it would have been obvious to one of ordinary skill in the relevant art at the time the invention was made to have provided Kurotori with an electrostatic ejection system taught by Saito '784 and with an ink jetting unit taught by Saito '996. But there is no reasonable motivation to combine the disparate teachings of Saito '784—which sets forth the advantages of not having a fixing—with Kurotori which teaches that fixing is performed. That is, these references are directed to two disparate types of systems and, therefore, one of ordinary skill in the art would not look to one to modify the other.

Second, for the sake of argument, even assuming that one of ordinary skill in the art were motivated to combine the references as suggested by the Examiner, any such combination still does not teach or suggest all the elements as set forth in Applicants' claims.

One feature of the presently claimed invention resides in melting the insoluble resins in the ink by heat and fixing the ink on a final recording medium, thereby obtaining printed matter having strengthened multicolor images. Thus, as independently set forth in each one of claims 1 and 6, each of the inks comprises at least a coloring material and a resin component. As set forth on page 58 of the specification, the colored particles are contained in resin particles for dispersion for the purpose of improving the fixing property, i.e., when they are heated.¹

The Examiner asserts that Kurotori teaches an ink jet system which discharges an oily ink containing a resin and a coloring component directly onto a recording paper.² But the Examiner is mistaken.

In contrast to that set forth in Applicants' claims, Kurotori teaches that the ink contains a soluble dye and a soluble resin (i.e., an already dissolved resin), and hence Kurotori is directed to improving the drying property of an organic solvent to fix images (see page 2 (page 266), left upper column, line 5). Thus, Kurotori does not teach or suggest the above-noted feature of the invention, i.e., carrying out fixing by melting the insoluble resin with heat.

Further, Saito '784 is directed to an ink jet system which conducts ejection of an ink by taking advantage of the fact that heating of an ink reduces the ink viscosity and facilitates ink-ejection. Thus, this ink jet system is distinct from the electrostatic ink jet system which induces ejection of ink by an electrostatic field as in the present invention (not necessitating such a viscosity-reducing function by heating, nor utilizing such a characteristic upon ejection).

Accordingly, even assuming that one of ordinary skill in the art were motivated to combine the references as suggested by the Examiner, any such combination would still not teach or suggest all the elements as set forth in Applicants' claims.

¹ Specification at page 58, 2nd full paragraph.

² Office Action at page 3, 1st to 3rd paragraphs.

Third, the Examiner has failed fully to set forth the basis of his rejection. The Board of Patent Appeals and Interferences has stated that an Examiner should not cite and rely only on an abstract of a foreign language document but, instead, should provide an English translation of the underlying document:³

When an examiner cites and relies only on an abstract, the applicant may wish to obtain a copy of the underlying document and submit a copy to the examiner when responding to a rejection relying on an abstract. In the event a reference is in a foreign language, if the applicant does not wish to expend resources to obtain a translation, the applicant may wish to request the examiner to supply a translation. If a translation is not supplied by the examiner, the applicant may wish to consider seeking supervisory relief by way of a petition (37 CFR § 1.181) to have the examiner directed to obtain and supply a translation. In the past, when neither the examiner nor the applicant rely on the underlying article, the board has often expended the resources necessary to obtain a copy of the underlying scientific article, as well as translations thereof. When it did so, however, the burden of examining the application fell on the board in the first instance. Moreover, to the extent that the board relies on parts of a translation not previously provided to an applicant, any affirmance generally has to be a new ground of rejection under 37 CFR §1.196(b)—which can result in further prosecution.

In accordance with the Board's directive in *Gavin*, Applicants respectfully request that the Examiner provide an English translation of Kurotori.

- The Examiner rejected claims 3, 9, and 10, under §103(a) as being unpatentable over Kurotori in view of Saito '784, Saito '996, and further in view of US Patent 4,314,263 to Carley (hereinafter Carley).

Because this rejection is based on Kurotori, Saito '784 and Saito '996, Applicants' comments as set forth above are pertinent here as well. Further, Carley does not teach or suggest anything that would make proper the combination of Kurotori, Saito '784, and Saito '966. Accordingly, this rejection is in error and should be withdrawn.

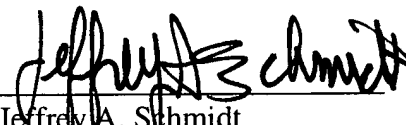
³ *Ex parte Gavin*, 62 USPQ2d 1680 (Bd. Pat. App. & Int. 2001) (unpublished).

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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